

1 1. A system interface, comprising:
2 a packet switching network;
3 a cache memory;
4 a plurality of directors, one portion of such directors being adapted for coupling to
5 a host computer/server and another portion of the directors being adapted for coupling to
6 a bank of disk drives, the plurality of directors and cache memory being interconnected
7 through the packet switching network;
8 each one of the directors is coupled to a crossbar switch;
9 wherein the cross bar switch is directly connected to at least two other ones of the
10 cross bar switches networks and indirectly connected to of other ones of the crossbar
11 switches through the at least two directly connected crossbar switches.

1 2. The system interface recited in claim 1 wherein the packet switching network
2 comprises the crossbar switches of the directly and indirectly connected crossbar
3 switches.

1 3. The system interface recited in claim 2 wherein the system interface includes a
2 plurality of the packet switching networks, each one of the packet switching networks
3 including:

4 a plurality of cross bar switches. each cross bar switch being connected:
5 (1) directly to crossbar switches of at least two other ones of crossbar switches in
6 such one of the packet switching networks and to one of the cross bar switches of
7 a second one of the plurality of packet switching networks; and, (2) indirectly to
8 other ones of the crossbar switches of such one of the packet switching networks
9 via the crossbar switch directly connected to such one of the packet switching
10 network, two of said at least two other ones of the crossbar switches in such one
11 of the packet switching networks being connected indirectly to two cross bar
12 switches of the second one of the packet switching networks, the two cross bar
13 switches of the second one of the packet switching networks being cross bar
14 switches connected indirectly to said one of the cross bar switches of the second
15 one of the plurality of packet switching networks.

1 4. The system interface recited in claim 1 including a cache memory coupled to
2 the directors through the packet switching network.

1 5. The system interface recited in claim 4 wherein the cache memory includes a
2 plurality of cache memory sections, each one of such sections being coupled to a
3 corresponding one of the crossbar switches.

1 6. The system interface recited in claim 5 wherein the packet switching network
2 comprises the crossbar switches of the directly and indirectly connected crossbar
3 switches.

1 7. The system interface recited in claim 6 wherein the system interface includes a
2 plurality of the packet switching networks, each one of the packet switching networks
3 including:

4 a plurality of cross bar switches, each cross bar switch being connected:
5 (1) directly to crossbar switches of at least two other ones of crossbar switches in
6 such one of the packet switching networks and to one of the cross bar switches of
7 a second one of the plurality of packet switching networks; and, (2) indirectly to
8 other ones of the crossbar switches of such one of the packet switching networks
9 via the crossbar switch directly connected to such one of the packet switching
10 network, two of said at least two other ones of the crossbar switches in such one
11 of the packet switching networks being connected indirectly to two cross bar
12 switches of the second one of the packet switching networks, the two cross bar
13 switches of the second one of the packet switching networks being cross bar
14 switches connected indirectly to said one of the cross bar switches of the second
15 one of the plurality of packet switching networks.